



First Public Health and Medicine Summit Scheduled for June 3-4

The Indiana State Department of Health (ISDH) will host the Public Health and Medicine Summit on June 3-4, 2008, at the Indianapolis (Airport) Adam's Mark Hotel. The Public Health and Medicine Summit brings together the activities of the Public Health Nurses Conference and the Public Health and Medicine Day.

Designed to encourage collaboration and networking among public health professionals and health care providers, it is hoped this inaugural Summit, "Building Bridges", will provide the foundation for expanding and improving Indiana's public health infrastructure. Quick, professional collaboration and response are critical for mitigating public health events. This Summit is an effort to strengthen these roles in a common forum and to establish crucial relationships across Indiana.

The Summit begins on **Tuesday, June 3**, with five optional concurrent workshops from 12:00 noon - 4:00 p.m. Participants who register for the conference may choose the specific workshop they would like to attend. Workshops include:

Disease Surveillance and Investigation: Targeted for public health nurses with up to five years of public health experience or those wanting a refresher, this workshop describes reportable disease surveillance, syndromic surveillance, outbreak investigation, and an update on I-NEDSS, the electronic reportable disease surveillance system currently under development. The workshop will also include a discussion of the proposed communicable disease reporting rule and will feature a panel of speakers.

Interviewing Skills for Sensitive Topics: In this interactive workshop, led by a disease intervention specialist from Bellflower Clinic in Indianapolis, participants will improve skills for asking questions about sensitive topics, such as sexual history, and learn how to create an open, non-threatening interviewing environment. Role-playing and discussion will be used throughout the workshop.

Viral Hepatitis A-E: Back by popular demand from the 2007 Public Health Nurse Conference, participants at this workshop will gain detailed information about clinical

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infection, laboratory testing and result interpretation, risk factors, prevention, and latest disease trends. Statistical information for incidence and prevalence for these infections in Indiana will also be included.

TB—Beginner and Advanced: Offered by the ISDH TB Elimination Program, this workshop will provide participants with information about clinical infection, laboratory testing and result interpretation, risk factors, and latest disease trends, including antibiotic resistance. Statistical information for incidence and prevalence of tuberculosis will also be included. The first two hours will cover basic, overview-type information; the second half will include more detailed information.

Leadership and Communication: The roles of public health and medical professionals have changed dramatically in the past few years, creating new challenges that demand leadership skills. In addition, as more professionals retire, new leaders must emerge to meet these challenges. In this workshop, offered by the team that created the Leadership At All Levels program at the ISDH, participants will learn the definition and principles of leadership and how to improve their personal leadership skills. Discussion and self-assessments will be included in this interactive workshop.

The program continues on **Wednesday, June 4**, at 8:00 a.m., with a welcome from State Health Commissioner Judy Monroe, MD, and a keynote plenary session by Assistant Surgeon General James M. Galloway, MD, on ***Public Health and Medicine Partnerships and Health Priorities***. Three concurrent sessions will be offered, and participants may choose from 11 topics when they register. Topics include:

Pediatric Obesity: A Medical Perspective to a Public Health Issue: The alarming rise in obesity among Indiana's youth will be discussed from the medical model. The burden, complications, and management of obesity will also be discussed.

The Impact of Secondhand Smoke on Health - New Research from the Field: This session will discuss newly published research regarding the impact of secondhand smoke (SHS) on cardiovascular health. Indiana's public opinion about SHS policy and the links associated with air quality will also be discussed.

Communicable Disease Rule: What Has Changed?: This session will provide an update on the proposed changes to the communicable disease reporting rule and information about I-NEDSS, the electronic reporting system under development.

Climate Change and the Public Health Response: This presentation will outline the potential health consequences of climate change and propose a public health approach to climate change, based on the 10 essential public health services, that addresses both clinical and population health services.

Vector-Borne Diseases in Indiana: This presentation will describe the clinical presentation and current epidemiology of tick-borne and mosquito-borne diseases in Indiana.

Antimicrobial Resistance in Indiana and Best Practices to Minimize Disease Burden: The epidemiology and clinical features of methicillin-resistant *Staphylococcus aureus* (MRSA) infections in children will be discussed along with new antimicrobial regimens and preventive measures.

Food Safety: Everyone Has a Role: This workshop, presented by the ISDH Food Protection and Epidemiology staff, will provide an understanding of prevention measures, including food inspections, regarding food safety. Foodborne illness investigation, along with the roles of the inspector, investigation team, and the importance of health care provider testing, treatment, and reporting will also be described.

Immunizations: The Centers for Disease Control and Prevention (CDC) has recently updated the recommended vaccination schedule. Recent changes and strategies for improving Indiana's current immunization rates will be proposed and discussed.

Medical Error Reporting: Reducing Errors in the Health Care Setting: In August 2007, the ISDH published its first annual Report on Medical Errors. This presentation will provide an overview of the medical error reporting system and discuss the events reported in 2006. The presentation will focus on the outcomes of the reporting system and the development of state health care quality initiatives to address patient safety issues.

Refugee Health: Health care needs of the refugee populations in Indiana will be discussed. The ISDH has recently revised the current domestic screening form and has updated guidelines for a more comprehensive public health assessment. Detailed discussion of the overseas medical screening process and the new domestic screening tool will also be included in the session.

Addressing Asthma in Indiana: The ISDH Asthma Program and the Asthma Alliance of Indianapolis will discuss strategies to promote and incorporate components of the newly updated National Heart, Lung, and Blood Institute's National Asthma Education and Prevention Program Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma (EPR3) into public health practice to address the burden of asthma in Indiana.

In addition, a luncheon presentation by David McSwane, professor at the IU School of Public and Environmental Affairs, on ***Emerging Issues in Food Safety*** will focus on emerging pathogens, imported foods, other contemporary food safety issues, and the steps that are being taken to protect the food supply. A closing plenary session on ***Hot Topics*** completes the day.

Registration is \$25 for general attendees and \$15 for students. CMEs will be available. Those interested in attending may register at: <https://www.inpha.org/summitform.asp>



What is I-NEDSS?

The Indiana National Electronic Disease Surveillance System (I-NEDSS) is a Web-based application that promotes the collection, integration, and sharing of data at federal, state, and local levels. The purpose of I-NEDSS is to automate the current process for reportable diseases, as defined by IAC 410

(http://www.in.gov/isdh/publications/comm_dis_rule.pdf). The system will include lab reports, communicable disease reports (CDR), and case investigations. Eventually, I-NEDSS will replace the paper-based reporting system currently in use.

Benefits of I-NEDSS include:

- increased speed
- increased accuracy
- increased accountability
- increased security
- increased situational awareness for state and local investigators

I-NEDSS currently consists of the following modules:

- **Notification Module** – health care providers and laboratories submitting electronic lab reports (ELR) and CDRs to the appropriate investigative unit at the local or state level
- **Case Investigation Module** – Investigative unit conducts case investigation and reports results to ISDH
- **National Reporting Module** – ISDH reports summary disease data to the Centers for Disease Control and Prevention (CDC) using the national Public Health Information Network (PHIN)

Additional modules are in the planning stages. Planning activities are being directed by the Surveillance Investigation Division (SID) and coordinated by the Public Health Preparedness and Emergency Response (PHPER) Division at the ISDH.

Where are we in the process?

The I-NEDSS Notification Module was released as a pilot beginning on March 31. Six local health departments have agreed to participate in the six-week pilot and provide feedback to the ISDH. Feedback information will be used to improve the system before statewide rollout.

The six local health departments participating in the pilot are:

- Hamilton
- Hendricks
- Johnson
- Floyd
- Kosciusko
- Putnam

What are the future plans for I-NEDSS?

Information and demonstrations on the I-NEDSS application, including all three modules, will be provided at the Indiana Public Health and Medicine Summit (http://www.in.gov/isdh/pdfs/PHMS_Flyer.pdf).

Development work will continue throughout the summer and fall of 2008 to incorporate feedback from the pilot into the I-NEDSS application and conduct further testing on the system.

The I-NEDSS Project Team is targeting a statewide release of this system during late 2008/early 2009. That release will represent the groundwork required for Indiana to further improve all reportable surveillance and disease management capabilities.

May Is Hepatitis Awareness Month

Mike Wilkinson, B.S.
ISDH Hepatitis C Epidemiologist

May is recognized worldwide as hepatitis awareness month. Specifically, World Hepatitis Day is May 19. This is a good time to provide awareness and education about viral hepatitis, specifically hepatitis C, for which there is no vaccine. It is estimated that over 4 million Americans are infected with hepatitis C. Hepatitis C is the most common bloodborne pathogen in the United States and is the leading cause of liver transplants in the United States. Over 5,000 reported cases were reported in Indiana in 2007.

Many local government officials across the United States have proclaimed May as hepatitis awareness month in their communities to raise awareness. Ideas to promote awareness about viral hepatitis include health fairs, public service announcements, and distribution of educational materials. The ISDH has a limited amount of brochures and educational materials available to provide to local communities.

Hepatitis C Chronic Case Reporting Remains Voluntary

The ISDH has decided that reporting of chronic hepatitis C cases will remain voluntary in Indiana. The Agency made this decision after conferring with other states and also realizing the limited funding, staffing, and resources available at the local level. However, chronic hepatitis C reporting and investigation has been and remains strongly encouraged. The risk factor data that are compiled from investigations are used to help ensure that educational and prevention resources are targeted appropriately.

In addition, it is important to realize that most (85%) hepatitis cases are asymptomatic, chronic cases. Many of these individuals may not know they are infected and, thus, may unknowingly spread the disease. Most local health departments (LHD) have conducted investigation of chronic hepatitis C cases and are encouraged to continue that effort. Cases of **acute** hepatitis C remain reportable within 72 hours.

Submitting Hepatitis C Case Investigation Reports

Some LHDs are still experiencing challenges when submitting hepatitis C case investigation reports to the ISDH through the Teleforms system. Detailed submission guidelines can be found on the LHD SharePoint site under *Hepatitis C Users Guide*.

The Teleforms system is used to send **completed** hepatitis C case investigations only. Data from these reports are entered electronically into a dedicated hepatitis C database. Please do not send case investigation reports for any other diseases through the Teleforms system. The following tips will also help ensure proper transmission of reports:

- Fax all six pages of the hepatitis C case investigation form to 317.233.9271
- Do not include a cover page
- Do not attach laboratory reports
- The document must be an original case investigation form, not a copy
- Information on the form should be typed, not handwritten

Public Health District Visits

Mike Wilkinson, ISDH Hepatitis C Epidemiologist, will visit Indiana's Public Health Districts to provide hands-on information about hepatitis C case report submission and surveillance. This training, which lasts 45 minutes-1 hour, has already been provided in Districts 1, 2, 3, 5 and 10. Upcoming training dates include:

District 6	April 25	Muncie Public Library	2:00 EDT
District 9	May 1	Scott County Courthouse	11:00 EDT
Districts 7/8	May 8	Monroe County Public Health Clinic	10:00 EDT

For additional information or questions, please contact Mike Wilkinson at 317.234.2827.

News from the Field...

Drive-through to Curb Flu

Karen S. Gordon
ISDH Field Epidemiologist, District 10

Pleasant autumn weekends in Indiana are commonly spent going to community fall festivals, watching a college football game, or working in the yard. Public health officials at the Warrick County Health Department (WCHD) participated in a less leisurely activity the first two Saturdays in November 2007. WCHD decided to offer flu shots to Warrick County residents on those weekends by using a method of delivery different from anything they had attempted in the past. Plans were made to employ drive-through clinics as the primary means for dispensing their annual supply of seasonal flu vaccine. Shots were available for \$10 to anyone aged 12 years and older. This strategy had been considered in a previous year but the delayed and uncertain shipment of vaccine prevented scheduling the clinics.

On November 3, a drive-through clinic was held from 10:00 a.m. to 1:00 p.m. in the Wal-Mart parking lot in Boonville. There had been some concern about whether or not the public would accept a vaccination given in an outdoor venue. However, workers who arrived on that first Saturday morning were greeted by at least 2 dozen cars in line 45 minutes before the clinic was due to open. The first hour of operation was extremely busy, with cars lining the entire length of the parking lot. After the initial surge had received vaccine, the numbers remained steady. During the 3 hours, vaccine was administered to 574 people. Comments from patrons included that coming to the clinic was convenient since they were coming into town for other errands, they liked the ease of not having to get out of their vehicles, and some seemed to enjoy the novelty of it. Those who seemed the most appreciative were drivers who transported one or more elderly family members who were wheelchair dependent or otherwise mobility challenged. Some drivers elected not to receive the shot themselves but brought others who needed it.

On November 10, a second clinic was offered with similar objectives and the same time frame. This clinic was set up in the parking area adjacent to the Apple Center in Newburgh. Once again, drivers navigated the stations, occupants rolled down their windows, rolled up their sleeves, and 563 people received their best protection for the upcoming flu season.

The WCHD envisioned the clinics as a low-cost, easy way of providing protection against influenza to the public, requiring less staff time and resources. Overall, 1,137 people received flu vaccine during the WCHD's drive-through clinics. This exceeded the original projections for delivery of 500 doses at each of the 2 clinic sites.

Additionally, the WCHD used the opportunity to conduct a full-scale mass immunization exercise. The goal of the exercise, titled FLU- X, was to test the WCHD's notification, communication, command, and response procedures including, in this case, the rapid administration of vaccine in a public health emergency. The scenario for this exercise was pandemic influenza. Other local agencies participating in the drill included the Sheriff's Department, Emergency Management Agency, American Red Cross, and the Salvation Army.

Sharon James, Kathy Manning, and Cecelia Scott, WCHD public health nurses, led the immunization effort. A group of volunteer nurses assisted with giving injections. Carmen Downing directed the administrative functions, particularly those involving rostered volunteers who aided with records completion. WCHD Emergency Preparedness Coordinator, Frank Hijuelos, was the event coordinator. All were pleased with the success of their venture.

In the Celebration of Leadership held on March 18, 2008, the WCHD was nominated in the Project Division of the Health & Social Service Category for the drive-through flu clinic project. The Celebration of Leadership is Leadership Evansville's awards ceremony to recognize the servant leaders in the community and region.

The author acknowledges Sharon James and Frank Hijuelos for their contributions to this article.

E³ Easy Epidemiology for Everyone

E³ is a new feature of the Indiana Epidemiology Newsletter dedicated to exploring the fundamentals of epidemiology. Each month, a different epidemiology concept will be explored to enhance understanding of basic epidemiology.

Cohort Studies

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ISDH Enteric Epidemiologist

Once an outbreak investigation is under way, epidemiologists need to determine the exposure or risk factor associated with the illness to prevent additional cases of infection. Epidemiologists usually conduct a study to compare exposures of people who are ill with people who are not ill. Two types of studies are commonly used: cohort and case-control. A cohort study is used when there is a defined population, group, party associated with a known *discrete* event. Cohort studies are commonly used in research, epidemiology, and public health and compare disease rates between exposed and non-exposed groups. For an outbreak, the only type of cohort study used is retrospective: the event has already occurred. Common events that would lead to a cohort study include: a school field trip, a banquet, or a one-time party at a restaurant.

In cohort studies, risk ratios are calculated to determine the level of risk associated with a particular exposure, such as consuming a certain food item or engaging in a certain activity. The higher the risk ratio, the more likely the exposure is associated with illness. If the risk ratio equals one, there is no greater risk associated with the exposure than chance alone.

Cohort Study Example

Complaint: The mother of a bride reports that several attendees of the wedding and reception held at Banquet Center A on April 5, 2008, have become ill with vomiting and diarrhea. Illness began within 12-48 hours of attending. Two hundred people attended the event. Menu items included chicken parmesan, pasta, green beans, salad, dinner rolls, wedding cake, and iced tea.

Initial Case Definition: Any previously healthy person who attended the reception at Banquet Center A on April 5, 2008, and became ill with diarrhea and/or vomiting within 48 hours.

Develop a Questionnaire: Should include questions about demographic information, symptoms, onset date, and yes/no questions for menu items and other possible exposures. Not every person has to be interviewed, but as many as possible should be interviewed to gather enough data.

Study Option: A cohort study would work, since there is a discrete event and a defined group.

Calculate Risk Ratio (RR): Calculations can be done manually, by a statistical program (Epi Info can be downloaded for free), or by a plug-in 2 x 2 table online.

- Set up a 2 x 2 table using the data from the questionnaires. Hint: If the value of one of the boxes is zero, then the calculation will not work. Add in a number, such as “0.5”, to all cells so calculations can be completed.
- Complete a 2 x 2 table for each possible exposure, in this example, for each menu item. The tables below show the calculations of the risk ratio for wedding cake.

	Ill	Not Ill		Ill	Not Ill
Exposed	A	B	Ate cake	26	5
Not Exposed	C	D	Did not eat cake	6	35

Risk Ratio (RR) = $[A/(A+B)] / [C/(C+D)] = [26/(31)] / [6/(41)] = \mathbf{5.73}$

Attendees who ate the cake were 5.73 times more likely to become ill than attendees that did not eat the cake. This risk ratio is compared to the risk ratios for the other menu items. Generally, the item with the highest risk ratio may be suspected as a possible vehicle of illness, although other statistical tests, such as a 95 percent confidence interval (CI), are usually conducted to support that finding.

Reference

1. Friis, Robert. Sellers, Thomas. Epidemiology for Public Health Practice. 3rd Edition. 2004.



Training Room

INDIANA STATE DEPARTMENT OF HEALTH IMMUNIZATION PROGRAM PRESENTS:

Immunizations from A to Z

Immunization Health Educators offer this FREE, one-day educational course that includes:

- Principles of Vaccination
- Childhood and Adolescent Vaccine-Preventable Diseases
- Adult Immunizations
 - Pandemic Influenza
- General Recommendations on Immunization
 - Timing and Spacing
 - Indiana Immunization Requirements
 - Administration Recommendations
 - Contraindications and Precautions to Vaccination
- Safe and Effective Vaccine Administration
- Vaccine Storage and Handling
- Vaccine Misconceptions
- Reliable Resources

This course is designed for all immunization providers and staff. Training manual, materials, and certificate of attendance are provided to all attendees. Please see the Training Calendar for presentations throughout Indiana. Registration is required. To attend, schedule/host a course in your area or for more information, please reference

<http://www.IN.gov/isdh/programs/immunization.htm>.

ISDH Data Reports Available

The following data reports and the *Indiana Epidemiology Newsletter* are available on the ISDH Web Page:

http://www.IN.gov/isdh/dataandstats/data_and_statistics.htm

HIV/STD Quarterly Reports (1998-June 2006)	Indiana Mortality Report (1999, 2000, 2001, 2002, 2003, 2004, 2005)
Indiana Cancer Incidence Report (1990, 1995, 1996, 1997, 1998)	Indiana Infant Mortality Report (1999, 2002, 1990-2003)
Indiana Cancer Mortality Report (1990-1994, 1992-1996)	Indiana Natality Report (1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005)
Combined Cancer Mortality and Incidence in Indiana Report (1999, 2000, 2001, 2002, 2003, 2004)	Indiana Induced Termination of Pregnancy Report (1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005)
Indiana Health Behavior Risk Factors (1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006)	Indiana Marriage Report (1995, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004)
Indiana Health Behavior Risk Factors (BRFSS) Newsletter (9/2003, 10/2003, 6/2004, 9/2004, 4/2005, 7/2005, 12/2005, 1/2006, 8/2006, 10/2006, 5/2007, 12/2007)	Indiana Infectious Disease Report (1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005)
Indiana Hospital Consumer Guide (1996)	Indiana Maternal & Child Health Outcomes & Performance Measures (1990-1999, 1991-2000, 1992-2001, 1993-2002, 1994-2003, 1995-2004)
Public Hospital Discharge Data (1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006)	Assessment of Statewide Health Needs – 2007

HIV Disease Summary

Information as of March 31, 2008 (based on 2000 population of 6,080,485)

HIV - without AIDS to date:

394	New HIV cases from April 2007 thru March 31, 2008	12-month incidence	6.85 cases/100,000
3,865	Total HIV-positive, alive and without AIDS on March 31, 2008	Point prevalence	67.19 cases/100,000

AIDS cases to date:

348	New AIDS cases from April 2007 thru March 31, 2008	12-month incidence	6.05 cases/100,000
4,094	Total AIDS cases, alive on March 31, 2008	Point prevalence	71.17 cases/100,000
8,560	Total AIDS cases, cumulative (alive and dead) on March 31, 2008		

REPORTED CASES

 of selected notifiable diseases

Disease	Cases Reported in March <i>MMWR</i> Weeks 10-13		Cumulative Cases Reported January – March <i>MMWR</i> Weeks 1-13	
	2007	2008	2007	2008
Aseptic Meningitis	16	11	36	45
Campylobacteriosis	30	8	68	52
Chlamydia	1,666	1,180	5,480	4,844
Cryptococcus	0	0	1	5
Cryptosporidiosis	2	4	9	16
<i>E. coli</i> , shiga toxin-producing	1	0	2	5
<i>Haemophilus influenzae</i> , invasive	3	3	8	13
Hemolytic Uremic Syndrome (HUS)	0	0	0	0
Hepatitis A	4	1	4	4
Hepatitis B	3	1	5	5
Histoplasmosis	5	1	13	8
Influenza Deaths (all ages)	Not Reportable	2	Not Reportable	9
Gonorrhea	655	482	2,172	2,044
Legionellosis	1	1	5	4
Listeriosis	0	0	2	0
Lyme Disease	0	0	1	1
Measles	0	0	0	0
Meningococcal, invasive	0	6	6	8
Mumps	0	0	0	0
Pertussis	2	1	3	4
Rocky Mountain Spotted Fever	0	0	0	0
Salmonellosis	43	7	94	44
Shigellosis	5	23	13	173

REPORTED CASES of selected notifiable diseases (cont.)

Disease	Cases Reported in March MMWR Weeks 10-13		Cumulative Cases Reported January – March MMWR Weeks 1-13	
	2007	2008	2007	2008
Group A Streptococcus, invasive	16	12	32	38
Group B Streptococcus, Newborn	1	1	3	5
Group B, Streptococcus, invasive	13	11	46	54
<i>Streptococcus pneumoniae</i> (invasive, all ages)	56	93	144	279
<i>Streptococcus pneumoniae</i> (invasive, drug resistant)	12	28	39	73
<i>Streptococcus pneumoniae</i> (invasive, <5 years of age)	1	10	7	21
Syphilis (Primary and Secondary)	6	15	12	34
Tuberculosis	12	9	37	29
Yersiniosis	1	1	1	3
Animal Rabies	0	0	0	0

For information on reporting of communicable diseases in Indiana, call the *Surveillance and Investigation Division* at 317.233.7125.



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